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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/529,717	08/22/2000	Kenji Kimura	PM268729	3228

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Kendrew H. Colton
Fitch, Even, Tabin & Flannery
1801 K Street, N.W.
Suite 4011
Washington, DC 20006

EXAMINER


SERGEANT, RABON A

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 03/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/529,717		KIMURA ET AL.	
	Examiner		Art Unit	
	Rabon Sergent		1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3 and 5-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,3 and 5-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. Applicants' responses of June 4, 2003, September 2, 2003, and December 23, 2003 have been considered.

2. Claims 7, 8, 11-14, and 24-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Firstly, within claims 12 and 13, despite applicants' response, applicants have failed to set forth a meaningful basis for the claimed parts by weight. In order for the claimed parts by weight to have meaning they must be based on a reference point, such as a quantity of the polyurethane. However, applicants' claims fail to recite such a reference point, and there is no way of determining what quantity of polyurethane is intended. For example, the claims have a different meaning if the claimed parts by weight are based on 1 part by polyurethane or 100 parts by weight polyurethane.

Secondly, within line 4 of claim 7, it is unclear how the language, "selecting said ingredients", further limits the claims.

Fourthly, it is unclear if the "more carbon atoms" language of claims 23 and 27 is limited by the upper limit of 18 carbon atoms within claims 22 and 26, respectively.

Lastly, the compound, 2,3,5-tris(4-tert-butyl-3-hydroxy-2,6-dimethylbenzyl)isocyanate, renders the claim indefinite, because the compound, as named, cannot exist. It is not possible to draw a structure that corresponds to the named compound.

3. Claim 29 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that

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the inventor(s), at the time the application was filed, had possession of the claimed invention.

Support has not been provided for the second recited compound of claim 29.

4. Claim 29 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicants have failed to provide enablement for the second recited compound of claim 29. As aforementioned, the recited compound cannot exist, as named.

5. Claims 7, 8, 11-14, and 24-28 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Despite applicants' remarks, the position is taken that adequate support has not been provided for claim 7, as amended. The examiner has found support only for the embodiment where the specific additives display an anti-leaching property. There appears to be nothing on the record to indicate that the anti-leaching characteristic of the specific additives is conveyed to all ingredients compounded within the composition.

6. Claims 7, 8, 11-14, and 24-28 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Despite applicants' response, applicants have failed to provide enablement for the claim language pertaining to "improving the anti-leaching property of

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polyurethane” as it pertains to components other than the specific additives disclosed within example 2 of the specification. Example 2 appears to be concerned with comparing the fugitive or leaching characteristics of the stabilizers within the polyurethane, when the polyurethane is subjected to dyeing and the accompanying extraction properties associated with dyeing. It is not seen that the example provides enablement for anything other than demonstrating the relative degrees that the respective stabilizers will leach out of the polyurethane. Therefore, the claim is not enabled for the concept of modifying the polyurethane so that any component within the polyurethane will be less likely to leach out after treatment. The rejection of claim 8 has been maintained as it depends from claim 7 and therefore carries the limitations of claim 7.

7. With respect to the rejections set forth within paragraphs 5 and 6, applicants’ arguments have been considered; however, the response is insufficient to overcome the rejections. Despite applicants’ remarks, the “ingredients” are not limited to the hindered phenols and amides. The word, “including”, is fully equivalent in meaning to “comprising”; therefore, the language, “said ingredients including”, is no more limiting than the language, “said ingredients comprising”.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 2, 3, and 5-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 46-27874 in view of Ishii et al. ('744) or JP 6-93070 or JP 57-108154.

The primary reference discloses the use of a long chain amide compound, corresponding to that of applicants' formula I, which is used as a polyurethane discoloration stabilizer. The reference specifically discloses that the stabilizer reduces the discoloration effects resulting from exposure to NO₂. Furthermore, the reference specifically addresses the addition of the stabilizer to Spandex filaments; therefore, the position is taken that the reference clearly encompasses the treatment of fibers and yarns. See abstract.

10. The primary reference is silent regarding the use of hindered phenol antioxidants; however, hindered phenols were known polyurethane antioxidants at the time of invention. This position is supported by the teachings of the secondary references. Furthermore, Ishii et al. specifically disclose the use of dye and pigment within stabilized polyurethanes at column 3, line 6 and applicants' specific hindered phenol (claim 29) at column 2, lines 3-10. Lastly, the disclosures of the secondary references disclose the subject matter of new claims 19, 20, 22, 26, and 28.

11. Since it has been held that it is *prima facie* obvious to utilize known ingredients for their known functions (*In re Linder*, 173 USPQ 356. *In re Dial et al.*, 140 USPQ 244.) and to combine individual components, each of which is known to be useful for the same purpose, to form a composition which is to be used for the very same purpose (*In re Kerkhoven*, 205 USPQ

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1069), the position is taken that it would have been obvious to utilize both an amide stabilizer and a hindered phenol stabilizer within a polyurethane, so as to arrive at the instant invention. Given the position taken within paragraph 3, the position is further taken that the process of claims 7 and 8 is essentially drawn to a process of adding the respective stabilizers to a polyurethane. It is not seen that the language of the preamble contributes a patentable distinction to the claims or “breathes life” into the claims.

12. Furthermore, with respect to the subject matter of claims 18, 23, 24, and 27, since the claimed structures differ from the disclosed structures only in that a cyclic alkyl or ethyl group is substituted for an alkyl group or methyl group, respectively, the position is taken that the claimed structures amount to obvious analogs or homologs, respectively. Since structurally similar compounds are expected to have similar properties, the position is further taken that one of ordinary skill in the art would have expected the respective compounds to function equivalently as stabilizers; therefore, it would have been obvious to utilize the respective compounds interchangeably. *In re Grabiak*, 226 USPQ 870, 769 F2d 729 (CAFC 1985). *In re Henze*, 85 USPQ 261.

13. Applicants’ arguments have been considered; however, the position is maintained that it would have been obvious to utilize the claimed hindered phenols and amides in accordance with their art recognized utilities, namely for their capabilities pertaining to stabilizing polyurethane and preventing discoloration. The position is ultimately taken that a *prima facie* case of obviousness has been set forth and that applicants have failed to adequately rebut the *prima facie* case.

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14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

R. Sergent
March 6, 2004


RABON SERGENT
PRIMARY EXAMINER